ature, and depth of snowfall. This data is used along with the terrain team's map operational products to depict the way changing weather conditions affect terrain. *(See Annexes B and C, Field Manual 34-81 for specific effects and critical meteorological values.)*

Leaders should keep in mind that weather is not just a winter consideration, particularly in arctic and high-alpine regions. The effects of weather upon snow-covered terrain in these regions can change dramatically during the warmer months, and daily thaw-and-freeze cycles can trigger avalanches.

It is difficult to estimate range in snow-covered terrain. Keeping a pace count is impractical for a soldier on skis or snowshoes, as is measuring the kilometers traveled with a 50-meter length of Type II nylon (parachute suspension) line. Fortunately, laser range finders — and to a lesser degree, split-image (parallax) range finders — are practical and highly accurate.

In high-alpine regions, altimeters are also used along with maps and compasses to determine location. Altimeters are sensitive to changes in barometric pressure, however, and it takes experience to differentiate changes in altitude from changes in weather. In one of my units, for example, when a sudden change in barometric pressure preceded visual signs of an approaching storm, our altimeter gave us the first indication. If we had not dug snow caves immediately, instead of climbing on toward the summit, we surely would have died from hypothermia in a few hours. (Sometimes, the most reasonable course of action is to wait for better weather conditions.)

In arctic regions, land navigation is also made more difficult by large magnetic declinations, by limited hours of daylight during winter months, by the lack of landmarks, and by the disappearance of existing landmarks during white-out conditions. Loran (long-range navigation) beacon and GPS (global positioning system) locators are not affected by these factors, but care must be taken to keep liquid-crystal displays from freezing. Locators with light-emitting-diode displays are preferable, because they are much more rugged.

Crevasses present another navigation hazard commonly found on glaciers. The crevasses that have formed over convex terrain, such as those at the leading edges of glaciers, tend to be open at the top, tens of meters across, and tens of meters deep. The crevasses that have formed over concave terrain, such as those at the bases of mountains, tend to be narrow at the top and are sometimes concealed by snow bridges. Although hidden crevasses are extremely dangerous for soldiers on foot and in vehicles, they are often safe to cross on skis.

Navigating over snow-covered terrain requires deliberate planning. As with many other military activities that present special dangers and challenges, this skill is also improved by training. One such training opportunity is the 6th Infantry Division's Northern Warfare Course. Those who complete this course are awarded skill qualification identifier E, Northern Warfare Expert. *(Some helpful manuals for training are FM 5-33, Terrain Analysis, 11 July 90; FM 31-71, Northern Operations, 21 June 71; FM 34-81, Weather Support for Army Tactical Operations, 31 August 89; FM 34-130, Intelligence Preparation of the Battlefield, 23 May 89; and FM 90-6, Mountain Operations, 30 June 80.)*

Even professional mountain guides sometimes have difficulty navigating over snow-covered terrain. For example, when guides who have survived avalanches are asked why they chose routes across avalanche hazard areas, they often reply that they had hiked along these routes in summer and "knew the terrain." Their mistake is in failing to recognize that mountain terrain changes when it is covered with snow.

To overcome hazards in snow-covered terrain and navigate successfully, an Army unit must use the IPB process, use well-prepared map operational products, pay attention to the available weather information, and take full advantage of cold region training opportunities.

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The Light Infantry Chaplain

CHAPLAIN (MAJOR) KENNETH L. SAMPSON

A light infantry battalion places certain distinctive requirements on its personnel—physical stamina, tolerance for change, initiative, risk-taking, small-unit operations. To be effective, a light infantry battalion chaplain and his assistant must possess some of these traits as well as others specifically related to the demands of their positions.

On the basis of my experience as a chaplain in light infantry combat units for more than eight years, I would like to offer some advice to battalion and company commanders on what your chaplain and his assistant can do for you and how you can guide them, integrate them into your unit, and tap their abilities. *(See also "The Battalion Chaplain," by Lieutenant Colonel Cole C. Kingseed, INFANTRY, July-August 1991, pages 14-16.)*

The battalion chaplain interacts daily with soldiers, noncommissioned officers, officers, and family members. As a result, he can often read the pulse of the unit, and his advice on the spiritual, moral, and morale climate of the command is invaluable. The chaplain will have information on a whole checklist of items that can help you develop your unit into a more effective fighting force. Is mail coming and going regularly? Are the soldiers alerted to the danger of heat or cold injuries? Are new soldiers and wives welcomed into the unit? Does a private have any knowledge of the mission he is on? Are schedules for religious services honored? Seek his input at weekly training management or command and staff meetings, or in personal discussions.

The chaplain is professionally trained to counsel, teach, and provide insight into a variety of areas. As a trusted and accessible member of your unit, he can provide the first line of support for the prevention or alleviation of such crises as suicide attempts, domestic violence, and marriage or family issues. He can offer insight on stress, grief, and battle preparedness. He can help with family member briefings and family assistance programs. Alcohol and drug abuse, moral leadership, and organizational effectiveness also fall within the areas of his training.

Refer soldiers and family members to him. Notify him of emergencies, hospitalized personnel, or soldiers in civilian or military confinement. He is usually on a first-name basis with the people at post assistance agencies. He can also offer confidentiality and act as a "safety valve"—someone on whom your personnel can unload their frustrations, without fear of reprisal or consequences. In this process, a soldier can experience renewed balance and perspective.

The chaplain is often the best trained communicator on your staff. Allow him blocks of instruction time for training your platoons and companies. Let him give your soldiers new insight at safety briefings and in moral guidance, spiritual development, and battle preparedness classes.

As a commander, you are responsible for the religious, spiritual, moral, and ethical well-being of all the personnel in your command, and the chaplain is there to support you in fulfilling this responsibility.

As an ordained minister in the denominational or religious group he represents, a chaplain is called upon to provide religious support for your unit. Use him to meet the spiritual needs of your soldiers and their family members. His presence—whether passing through the barracks, the dining facility, the motor pool, or the charge of quarters area—can bolster the spirit of all soldiers.

In garrison or on field training exercises the soldiers may be either "psyched up" or "stressed out," battling fatigue or boredom, depending on their individual situations. Family members may also experience the isolation of a distant post or the absence of a husband and father. The chaplain can often step into such an environment and serve as a living symbol of faith and offer much-needed stability.

To a young soldier hard at work digging a foxhole, the chaplain often represents more than his traditional role as a pastor, priest, or rabbi; he may also represent a distant father, mother, grandparent, coach, or older brother.

He performs ceremonies or provides religious services and instruction (baptisms, marriages, worship, spiritual growth, and study). He also helps ensure that the free exercise of religion is observed in the unit.

You can help your unit ministry team further by emphasizing the following areas:

Soldiering. The members of the unit ministry team must establish their credibility in a light infantry combat unit. It is good for the soldiers to see their chaplain look and act like a soldier. There is no better way for him to develop respect and confidence among the soldiers. Make sure he knows how to wear his load-bearing equipment, carry his rucksack, and perform basic soldiering skills. Stress the value of road marching, map reading, and surviving on the battlefield.

Physical Readiness. To undergo the rigors of the light infantry soldier, the chaplain must be in extremely good physical condition. He also gains credibility through daily physical training and regular road marches with different platoons and companies. Allow him opportunities for remedial PT if he needs it. Assign a well-motivated NCO or officer to coach him and help him make the most of his abilities. Soldiers appreciate knowing their chaplain is working hard to improve or maintain his physical conditioning.

Field Training. Keep the chaplain focused on field training, because this, too, improves his credibility with the soldiers. When units are training hard, encourage him to be there. The more miserable the weather and the more difficult the training, the more the soldiers need him. He doesn't have to be in the field for long—usually an evening meal, an overnight stay, and breakfast with the soldiers is enough.

By being positive, looking for simple pleasures, and demonstrating that one can survive and even enjoy cold nights and frosty mornings, he can inspire others to "love the field." In "traveling light and freezing at night," with feet blistered and sore, the chaplain shares hardships with the soldiers. These experiences become opportunities for bonding and establishing camaraderie and unit identity, and also for future ministry.

The chaplain must know the unit's mission. To help him, make sure he contributes to the operational planning process, files a religious support plan, and keeps up with the flow of the battle. This is a key to relating spiritual guidance to what the soldier must do and endure.

Spiritual Substance. Amid these efforts to relate to the soldiers, the chaplain is also unique among your staff officers. He often combines the enthusiasm and imagination of a youth director, the stamina of a scout leader, and seemingly limitless compassion. He may be tempted to engage in a flurry of activity—night ambush training, company reconnaissances, hospital visits, day patrols—thinking he is effective only when he is as frenzied as other leaders around him; you may need to temper this enthusiasm to make sure he maintains his spiritual substance.

A chaplain is in the "soul caring" business. By listening, observing, and caring, he can sense the spiritual and religious climate of the unit. And you should make sure he gets the time he needs to keep his own spiritual reserves high.

Consider his schedule. If he has been with a platoon in the local training area overnight, make sure he takes the afternoon off. Also, allow him a full day each quarter for spiritual reflection and prayer at a local retreat center. And when he works Sunday morning and evening, for example, see that he has an opportunity to spend some extra time with his family during the week.

S.L.A. Marshall once said that "it is the touch of human nature which gives men courage and enables them to make proper use of their weapons." Your chaplain can often provide this touch of human nature so necessary to the soldiers and their families. He can help increase the moral courage that is so vital to survival on the battlefield. The spiritual message he represents and proclaims can minister to the deepest needs of the soldiers. Take advantage of these abilities, and use him to enrich your entire command.

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Task Organizing CSS

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We in the Army have spent a great deal of time and effort devising the best mix of combat units for our combined arms battalion task forces. But we have not devoted this same attention to the combat service support (CSS) assets needed to support these forces. The key to sustaining a task force effectively begins with the assurance that the cross-attachment of CSS assets is complete.

We must do CSS planning concurrently with our tactical planning, although doctrinal guidance for this has not been abundant. Task force organization is determined by the brigade headquarters. Once the maneuver task organization is determined, CSS assets must be task organized to sustain the unit for combat operations.

For the purposes of this article, we are discussing the organization of a balanced task force and using Tables of Organization and Equipment (TOEs) 07246L2 (equipped with Bradley fighting vehicles) for the mechanized infantry battalion and TOE 17376L2 (equipped with M1A1 tanks) for the armor battalion. (TOEs provide a common basis for outlining the principles for the cross-attachment of CSS assets, while MTOEs vary.) For purposes of this discussion, we will look at cross-attachment by class of supply and by CSS sub-functional areas.

Class I. The cross-attachment of mess support is not required. The only adjustment needed is a new headcount for each task force to allow the mess section to prepare the correct number of meals for each company, company team, and separate platoon.

Classes III and V. The support platoon for each battalion is divided into the headquarters element, a transportation section, Class III/V squads, and a mess section. The headquarters element and the transportation section remain intact during cross-attachment. The Class III/V squads are organized as shown in Table 1.

When two companies are cross-attached for a balanced task force, each battalion gives up two Class III/V squads. By cross-attaching the squads instead of individuals and individual vehicles, the commander maintains unit integrity, and each squad leader (88M30) retains positive control of his personnel. In addition, the habitual relationship between each Class III/V squad and the particular company it supports leads to more effective resupply operations.